Project Management with Agile

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Agile Introduction

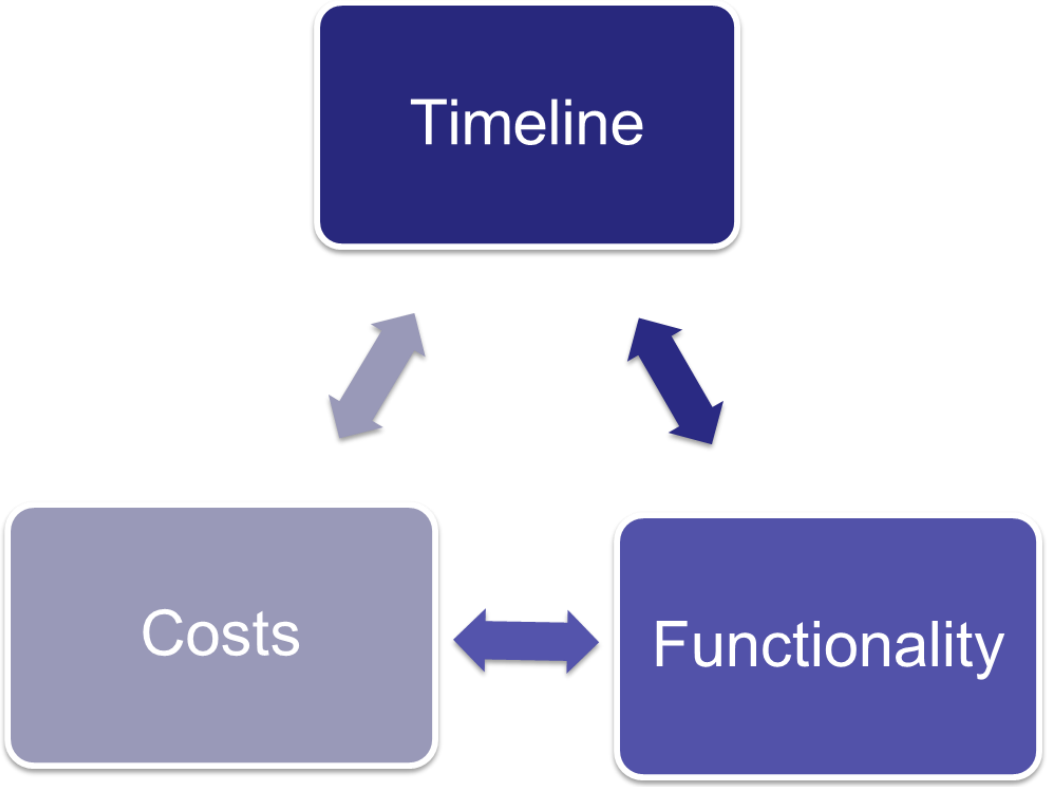
Gold Systems switched from Waterfall to Agile in 2005.

We wanted to address the challenges of:

- Change Control – "I'll know it when I see it"
- Managing Risk – Contractual obligations and change
- Morale - Heroic acts by staff to complete projects
- Timeline, functionality, costs quandary

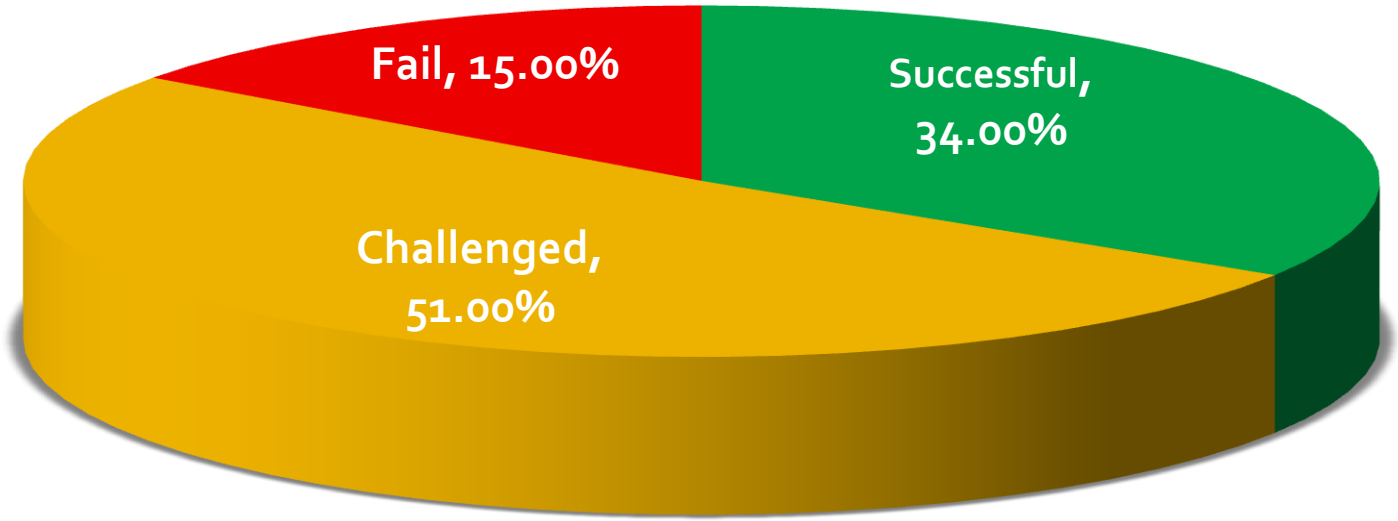
Agile Introduction

The Project Management Dilemma:

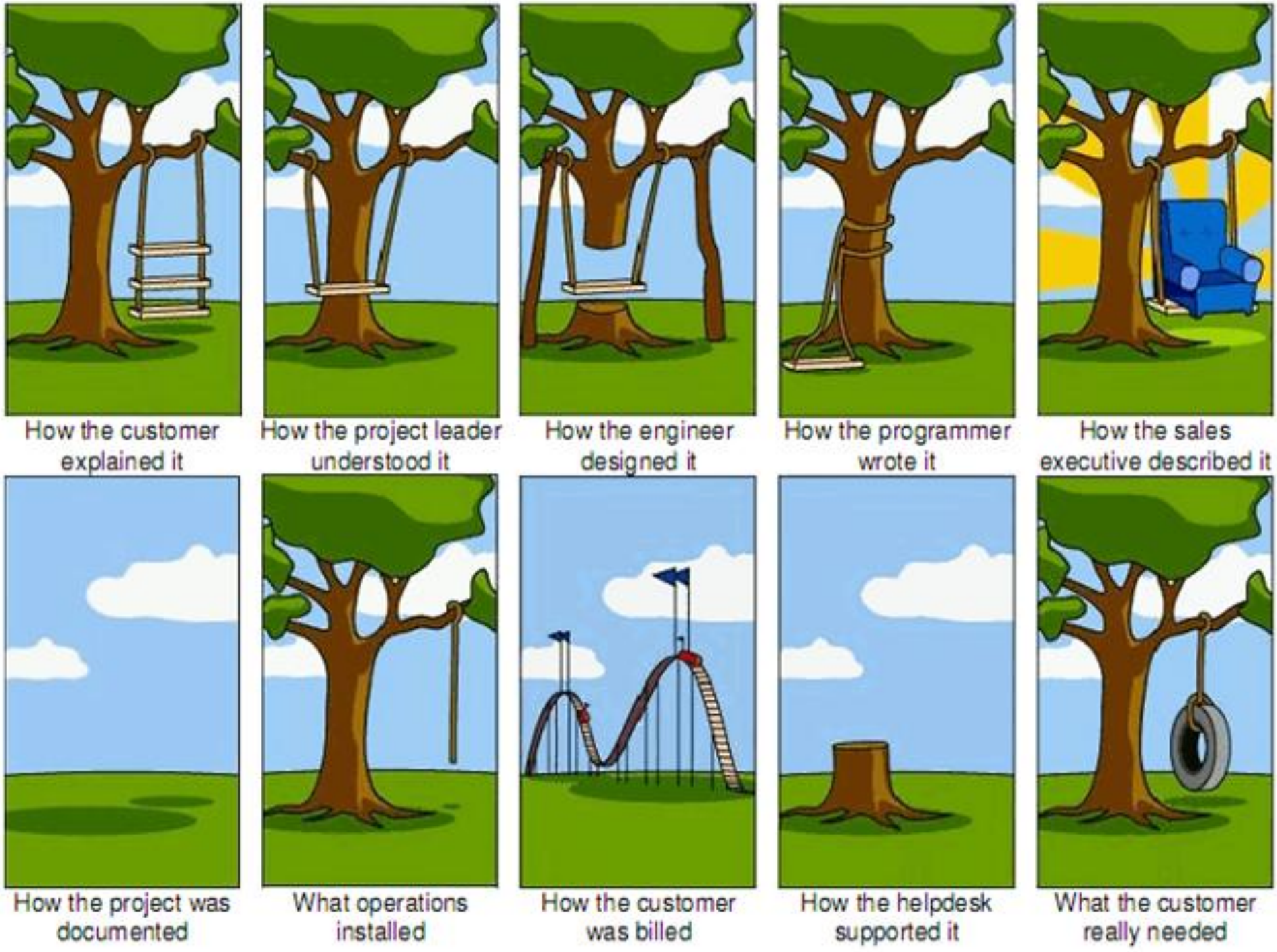


Agile Introduction

Software development interfaces with the most complex operating systems on the planet: People



* The Standish Group, 10th Annual CHAOS Report


How the customer explained it
How the project leader understood it
How the engineer designed it
How the programmer wrote it
How the sales executive described it
How the project was documented
What operations installed
How the customer was billed
How the helpdesk supported it
What the customer really needed

Manifesto for Agile Software Development

We are uncovering better ways of developing
software by doing it and helping others do it.
Through this work we have come to value:

Individuals and interactions over processes and tools
Working software over comprehensive documentation
Customer collaboration over contract negotiation
Responding to change over following a plan

That is, while there is value in the items on
the right, we value the items on the left more.

Kent Beck
Mike Beedle
Arie van Bennekum
Alistair Cockburn
Ward Cunningham
Martin Fowler
James Grenning
Jim Highsmith
Andrew Hunt
Ron Jeffries
Jon Kern
Brian Marick
Robert C. Martin
Steve Mellor
Ken Schwaber
Jeff Sutherland
Dave Thomas

STOP

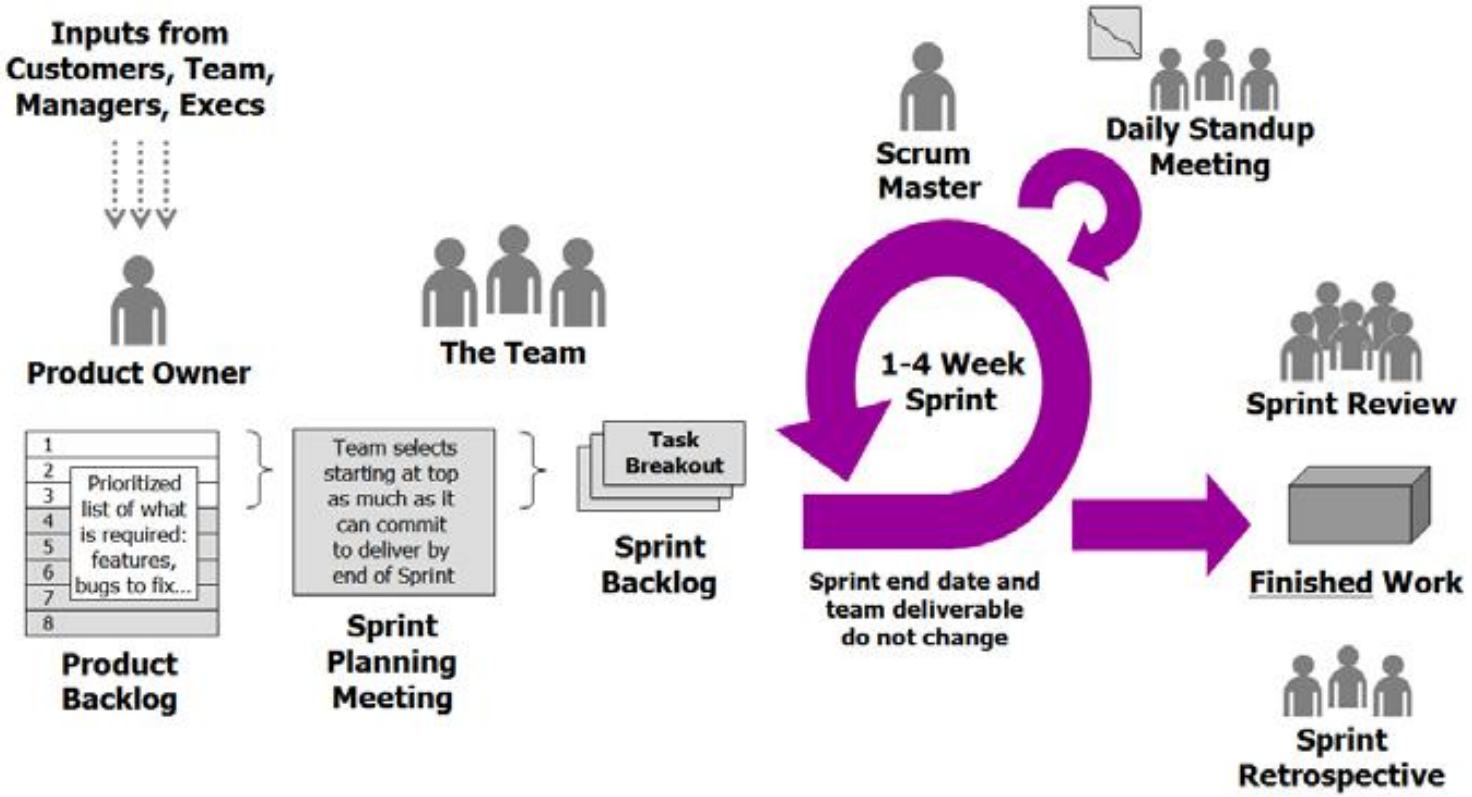
Benefits of Agile

The Core of Agile Development:

Scrum

- **Self-organizing teams** – team members select tasks
- **Accountability** - daily standup meeting, daily measurement, peer pressure
- **Quick delivery** – iterations, demonstrations
- **Flexibility** – welcome change, understandable change control processes
- **Streamlined artifacts** – prototypes and backlogs

Agile Introduction



Benefits of Agile

Results

- Improvement in cost management
- Projects match client desires upon completion
- Results still highly depend on client support
- Client support and understanding in managing costs
- We found you can hybrid approach methods

> *"At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly."*

* http://www.agilemanifesto.org/principles.html

Challenges of Agile

Demands Participation
Engaged vs. non-engaged Product Owner

Rigid Contract or Project Requirements
Agile needs flexibility to be effective

Desire for Extensive Project Documentation
Agile uses prototypes quite often for documentation of requirements

Scalability Team size
It's very hard to grow Agile teams larger than 7-8 people

Agile Requires Cultural Change – Without participant "buy in" Agile will fail as a methodology

Challenges of Agile

Maintenance vs. New Development
Agile as a methodology struggles in projects that have gone into a "maintenance" mode.

Agile and the PM

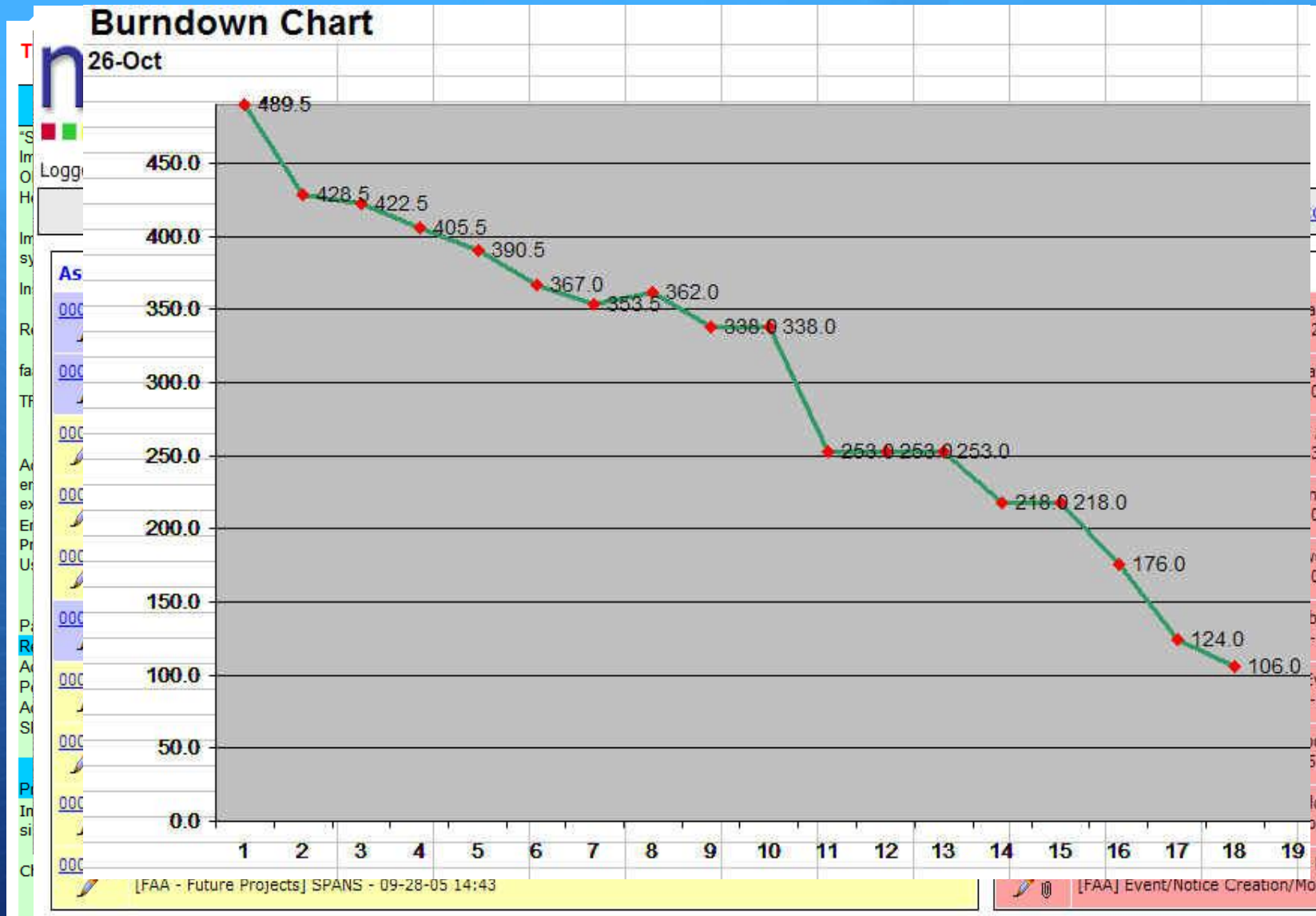
Scrum Master vs. PM

Our Experience: **You need both!**

Scrum Master - Manages the technical direction of the team and removes architectural hurdles (protects team).

Project Manager -Manages the product owner's expectations, product budget, and removes political hurdles (protects client).

Both - Manage the commitment to timeline and features.


Burndown Chart
26-Oct
489.5
428.5
422.5
405.5
390.5
367.0
353.5
362.0
338.0
338.0
253.0
253.0
253.0
218.0
218.0
176.0
124.0
106.0
450.0
400.0
350.0
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Case Studies

VITAL RECORDS

- Modular technology upgrades
- Feature driven iterations
- Client access to issue tracking

MONTANA STATE FUND

- Release plans, change control
- Visual flows
- Proxy Product Owner

Summary

Discussion Questions:

What is Agile?

What are the benefits and challenges?

What does the PM do in Agile?

Is Agile appropriate for all project types?

Q & A

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